Safety Attribute Inspection (SAI) Data Collection Tool 5.1.7 Special Navigation Areas of Operation (OP) Revision#:3 Revision Date:09/15/2009

ELEMENT SUMMARY INFORMATION

Scope of Element:

Purpose (operator's responsibility): To ensure continuous navigational reliability in accordance with the operator's Special Navigation Areas of Operation (special use airspace) authorizations.

Objective (FAA oversight responsibility): To determine if the operator's Special Navigation Areas of Operation process:

- Meets all applicable requirements of Title 14 of the Code of the Federal Regulations (14 CFR) and FAA policies,
- Incorporates the safety attributes, and
- Identifies any shortfalls in the operator's Special Navigation Areas of Operation process.

Specific Instructions:

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SUPPLEMENTAL INFORMATION

Regulatory Requirements:

B.029, Operations Specifications

B.036, Operations Specifications

B.038, Operations Specifications

B.039, Operations Specifications

B.040, Operations Specifications

B.050, Operations Specifications

91.703, Operations of civil aircraft of U.S. registry outside of the United States.

91.705, Operations within airspace designated as Minimum Navigation Performance Specification Airspace.

119.43, Certificate holder's duty to maintain operations specifications.

119.49, Contents of operations specifications

121.135, Manual contents

121.355, Equipment for operations on which specialized means of navigation are used.

121.445, Pilot in command airport qualification: Special areas and airports.

121 App..G, SRR 121 Appendixes

Related CFRs & FAA Policy/Guidance:

Related CFRs:

Intentionally left blank

FAA Policy/Guidance:

FAA Order 8900.1, Volume 4, Chapter 1, Section 5
FAA Order 8400.33, paragraph 9 & 10, Procedures for Obtaining Authorization for Required Navigation
Performance 4 (RNP-4) Oceanic and Remote Area Operations

SAI SECTION 1 - PROCEDURES ATTRIBUTE Objective: The questions in this section of the SAI will help verify that the operator's documented procedures identify who, what, when, where, and how those procedures are accomplished. These procedures must allow all personnel to perform their duties and responsibilities with a high degree of safety. 14 CFR part 121.135(a)(1) Tasks The inspector shall accomplish the following tasks: Review the information in the Supplemental Information section of this SAI. Review the duties and responsibilities for management and other personnel who accomplish the 2 processes associated with this element. Review the documentation of the processes associated with this element. **Questions** 1.1 Do procedures for operating a civil aircraft engaged in extended overwater ☐ Yes ☐ No, Explain operations comply with Annex 2 (Rules of the Air) to the Convention on ☐ Not Applicable International Civil Aviation? Updated: Rev # 3 on 09/15/2009 SRRs: 91.703(a)(1) Kind Of Question: Flag, Supplemental 1.2 Do procedures for operating a civil aircraft of U.S. registry engaged in extended ☐ Yes No, Explain overwater operations outside of the United States comply with 14 CFR part ■ Not Applicable 91.117 (c), 91.127, 91.129, and 91.131?

When operating a civil aircraft of U.S. registry within the airspace of a foreign

country, do procedures require compliance with the flight operations regulations

Are procedures for operating a civil aircraft of U.S. registry outside of the United

States consistent with applicable regulations of the foreign country where the

Do procedures require compliance with 14 CFR part 91.705 when operating a

civil aircraft of U.S. registry outside of the United States and within an area

aircraft is operated or with Annex 2 of the Convention on International Civil

Updated: Rev # 3 on 09/15/2009

Updated: Rev # 3 on 09/15/2009

Updated: Rev # 3 on 09/15/2009

Kind Of Question: Flag, Supplemental

Kind Of Question: Flag, Supplemental

Kind Of Question: Flag, Supplemental

SRRs: 91.703(a)(1)

within that airspace?

SRRs: 91.703(a)(2)

Aviation if applicable?

SRRs: 91.703(a)(3)

1.3

1.4

1.5

☐ Yes

Yes
No, Explain

Yes

☐ No, Explain

☐ No, Explain

■ Not Applicable

Not Applicable

	designated as Minimum Navigation Performance Specifications (MNPS) airspace?	Not Applicable
	Updated: Rev # 3 on 09/15/2009 SRRs: 91.703(a)(4) Kind Of Question: Flag, Supplemental	
1.6	Do procedures specify that the operator will operate a civil aircraft of U.S. registry in MNPS airspace only if the aircraft has approved navigation performance capability that complies with the requirements of 14 CFR part 91, appendix C?	Yes No, Explain Not Applicable
	Updated: Rev # 3 on 09/15/2009 SRRs: 91.705(a)(1) Kind Of Question: Flag, Supplemental	
1.7	Do procedures specify that the operator will operate a civil aircraft of U.S. registry in MNPS airspace only if authorized by the Administrator? Updated: Rev # 3 on 09/15/2009 SRRs: 91.705(a)(2)	Yes No, Explain Not Applicable
	Kind Of Question: Flag, Supplemental	
1.8	Do procedures for domestic, flag, or supplemental operations contain authorization and limitations for routes and areas of operations?	Yes No, Explain
	Updated: Rev # 3 on 09/15/2009 SRRs: 119.49(a)(6); 119.49(b)(6) Kind Of Question: Flag, Supplemental, Domestic	
	Related Design JTIs:	
	 Check that the Operator's manual system contains instructions to ensure each operator conducting domestic, flag, commuter or supplemental operations obtains operations specifications. (Containing authorization and limitations for routes and areas of operations). (JTI ID: 15) 	
	Sources: 119.49(a)(6); 121.135(b)(26)	
1.9	When operating in MNPS airspace, do special navigation areas of operation procedures address the following topics:	Yes No, Explain Not Applicable
	Enroute flight,Navigation,Communication?	
	Updated: Rev # 3 on 09/15/2009 SRRs: 121.135(b)(5) Kind Of Question: Flag, Supplemental	
1.10	Do procedures for dispatch, release, or continuance of flight address inoperative or unserviceable equipment that is required for operation in MNPS airspace?	Yes No, Explain Not Applicable
	Updated: Rev # 3 on 09/15/2009 SRRs: 121.135(b)(5) Kind Of Question: Flag, Supplemental	☐ Ivot ∨hhiicanie

1.11		dures provide the appropriate enroute operations specifications n including the following information for each approved route:	Yes No, Explain Not Applicable
	• Th In • Ar	he types of airplanes authorized, he type of operation conducted (e.g. Visual Flight Rules (VFR), strument Flight Rules (IFR), day, night), ny other pertinent information necessary for domestic or flag perations in MNPS airspace?	
	SRRs: 12	Rev # 3 on 09/15/2009 1.135(b)(6) uestion: Flag, Supplemental, Domestic	
	Related D	Design JTIs:	
	or ap is	heck that the Certificate Holder's manual system contains instructions of conducting domestic or flag operations and that the manual contains operopriate information from the en route operations specifications that appropriate for each group of personnel. (JTI ID: 26) ources: 121.135(b)(26); 121.135(b)(6)	
1.12	Do proced	dures provide the appropriate information for supplemental operations	☐ Yes
	in MNPS a		☐ No, Explain ☐ Not Applicable
	Note: This inforr	mation is derived from the operations specifications, and includes:	☐ Not Applicable
		rea of authorized operations,	
		ypes of airplanes authorized, ype of operation such as VFR, IFR, day, night, and	
	• A	ny other information pertinent to supplemental operations in MNPS irspace.	
	SRRs: 12	Rev # 3 on 09/15/2009 1.135(b)(7) uestion: Supplemental	
1.13	Are there	pilot route procedures and airport qualification procedures applicable	Yes
1.15		ions in MNPS airspace?	No, Explain
	SRRs: 12	Rev # 3 on 09/15/2009 1.135(b)(22) uestion: Flag, Supplemental	Not Applicable
	Related D	Design JTIs:	
	1. Cl	heck that the Certificate Holder's manual system contains instructions or conducting flag and/or domestic operations manual contains oppropriate information for the pilots for each route procedure. (JTI ID:	
		ources: 121.135(b)(21); 121.135(b)(26)	
	fo ap	heck that the Certificate Holder's manual system contains instructions or conducting flag and/or domestic operations manual contains oppropriate information for the pilots for each airport qualification. (JTI 0: 30)	

		Sources: 121.135(b)(21); 121.135(b)(26)	
1.14		re pilot and dispatcher route and airport qualification procedures ble for operations in MNPS airspace?	Yes No, Explain Not Applicable
		d: Rev # 3 on 09/15/2009 121.135(b)(22)	
		Question: Flag, Supplemental	
	Related	d Design JTIs:	
	1.	Check that the Operator's manual system contains instructions for conducting flag and/or domestic operations manual contains appropriate information for the pilot and dispatcher for each route and airport qualification (JTI ID: 31)	
		Sources: 121.135(b)(21); 121.135(b)(26)	
1.15	Radar of and the	cedures specify that the operator will conduct operations using a Doppler or Inertial Navigation System outside the 48 contiguous United States District of Columbia, only if such systems have been approved in ance with 14 CFR part 121, appendix G?	Yes No, Explain Not Applicable
	SRRs:	d: Rev # 3 on 09/15/2009 121.355(a)(1); 121 AppG Question: Flag, Supplemental	
	Related	d Design JTIs:	
	1.	Check that the operator has instruction to ensure that the FAA-approved airplane flight manual, or supplement thereto, must include pertinent material as required to define the normal and emergency operating procedures and applicable operating limitations associated with INS performance (such as maximum latitude at which ground alignment capability is provided, or deviations between systems). (JTI ID: 43)	
	•	Sources: 121 AppG(2)(g); 121.135(b)(26)	
	2.	Check that the operator's training manual for dispatchers and flight crewmembers initial training includes duties and responsibilities as it pertains to Inertial Navigation Systems. (JTI ID: 45)	
	0	Sources: 121 AppG(5)(a)	
	3.	Check that the Operator's training manual for pilots includes theory and procedures, limitations, detection of malfunctions, preflight and inflight testing, and cross-checking methods for Inertial Navigation Systems (JTI ID: 47)	
		Sources: 121 AppG(5)(b)(1)	
	4.	Check that the Operator's training manual for pilots include use of computers, an explanation of all systems, compass limitations at high latitudes, a review of navigation, flight planning and applicable meteorology for Inertial Navigation Systems. (JTI ID: 54)	
	_	Sources: 121 AppG(5)(b)(2)	
	5.	Check that the Certificate Holder's training manual for pilots include the methods for updating by means of reliable fixes for Inertial Navigation Systems. (JTI ID: 60)	
		Sources: 121 AppG(5)(b)(3)	
	6.	Check that the Certificate Holder's training manual for pilots include the actual plotting of fixes for Inertial Navigation Systems. (JTI ID: 61)	

		Sources: 121 AppG(5)(b)(4)	İ
	7.	Check that the Operator's training manual for pilots and dispatchers include abnormal and emergency procedures for Inertial Navigation Systems. (JTI ID: 62)	
		Sources: 121 AppG(5)(c)	
1.16	route o	cedures require that a pilot in command flying between terminals over a rarea that requires a special type of navigation qualification, must have strated that qualification on the applicable navigation system within the ing 12 calendar months by one of the following methods:	Yes No, Explain Not Applicable
	•	By flying over a route or area as PIC using the applicable special type of navigation system, By flying over a route or area as PIC under the supervision of a check airman using the special type of navigation system, By completing the training program requirements of 14 CFR part 121, appendix G?	
	SRRs:	d: Rev # 3 on 09/15/2009 121.445(d)(1); 121.445(d)(2); 121.445(d)(3) f Question: Flag, Supplemental, Domestic	
	Related	d Design JTIs:	l
	1.	Check that the Operator's manual system contains information to ensure that they will not use and no person may serve as pilot in command between terminals that require special qualification unless within the preceding 12 calendar months, that person has demonstrated qualification in a manner acceptable to the Administrator by one of the following methods: (1) By flying over a route or area as pilot in command using the applicable special type of navigation system. (2) By flying over a route or area as pilot in command under the supervision of a check airman using the special type of navigation system. (3) By completing the training program requirements of 14CFR Part 121 Appendix G (JTI ID: 35)	
	2.	Sources: 121.135(b)(26); 121.445(d)(1); 121.445(d)(2); 121.445(d)(3) Check that the Certificate Holder's manual system contains information to ensure that they will not use and no person may serve as pilot in command over a route that requires qualification unless, within the preceding 12 calendar months, that person has demonstrated qualification on the applicable navigation system in a manner acceptable to the Administrator, by one of the following methods: (1) By flying over a route or area as pilot in command using the applicable special type of navigation system. (2) By flying over a route or area as pilot in command under the supervision of a check airman using the special type of navigation system. (3) By completing the training program requirements of 14CFR Part 121 Appendix G. (JTI ID: 37) Sources: 121.135(b)(26); 121.445(d)(1); 121.445(d)(2); 121.445(d)(3)	
	3.	Check that the Certificate Holder's manual system contains information to ensure that they will not use and no person may serve as pilot in command over an area that requires a special type of navigation qualification unless, within the preceding 12 calendar months, that person has demonstrated qualification on the applicable navigation system in a manner acceptable to the Administrator, by one of the following methods: (1) By flying over a route or area as pilot in	

	command using the applicable special type of navigation system. (2) By flying over a route or area as pilot in command under the supervision of a check airman using the special type of navigation system. (3) By completing the training program requirements of 14CFR Part 121 Appendix G. (JTI ID: 39) Sources: 121.135(b)(26); 121.445(d)(1); 121.445(d)(2); 121.445(d)(3)	
1.17	Do procedures address the intent of the guidance contained in FAA Order 8900.1, Volume 4, Chapter 1, Section 5?	Yes No, Explain Not Applicable
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	
1.18	Do procedures address the intent of the guidance contained in FAA Order 8400.33, paragraphs 9 and 10?	☐ Yes ☐ No, Explain ☐ Not Applicable
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	
1.19	Does the manual include a requirement to comply with the operations specification related to this element including clearly identified excerpts, references, mandatory compliance requirements, or other information that will keep employees informed of the impact on their duties and responsibilities?	Yes No, Explain
	Updated: Rev # 3 on 09/15/2009 SRRs: B.029; B.036; B.038; B.039; B.039; B.040; B.050; 119.43(b); 119.43(c); 121.135(a)(4) Kind Of Question: Flag, Supplemental, Domestic	
1.20	Do policies and procedures include the duties and responsibilities for personnel involved with this element?	Yes No, Explain
	Note(s): This includes personnel, in addition to those required by 14 CFR part 119, who have authority and responsibility for processes covered by this element.	
	Updated: Rev # 3 on 09/15/2009 SRRs: 121.135(b)(2) Kind Of Question: Flag, Supplemental, Domestic	
1.21	Does the manual refer to the appropriate sections of 14 CFR, and are the procedures consistent with the appropriate 14 CFR references or Operating Certificate concerning this element	Yes No, Explain
	Note(s): Procedures for Flag and Supplemental operations must be consistent with applicable foreign regulations as well.	
	Updated: Rev # 3 on 09/15/2009 SRRs: 121.135(a)(4); 121.135(b)(3) Kind Of Question: Flag, Supplemental, Domestic	
1.22	Does the manual contain general policies that require compliance with the SRRs?	Yes No, Explain
	Updated: Rev # 3 on 09/15/2009 SRRs: 121.135(b)(1)	

Kind Of Question: Flag, Supplemental, Domestic

	SAI SECTION 1 - PROCEDURES ATTRIBUTE
	Drop-Down Menu
1.	No policy, procedures, instructions, or information specified.
2.	Procedures or instructions and information do not identify who, what, when, where, how.
3.	Policy, procedures, or instructions and information do not comply with CFR.
4.	Policy, procedures, or instructions and information do not comply with FAA policy and guidance.
5.	Policy, procedures, or instructions and information do not comply with other documentation (e.g., manufacturer's data, Jeppesen Charts, etc.).
6.	Policy, procedures, or instructions and information unclear or incomplete.
7.	Documentation quality (e.g., unreadable or illegible).
8.	Policy, procedures, or instructions and information inconsistent across certificate holder manuals (FOM - Flight Operations Manual to GMM - General Maintenance Manual, etc.).
9.	Policy, procedures, or instructions and information inconsistent across media (e.g., paper, microfiche, electronic).
10.	Resource requirements incomplete (personnel, facilities, equipment, technical data).
11.	Other.

Objective: The questions in this section of the SAI will help determine if controls (i.e. checks and restraints) are designed into the processes associated with this element to ensure policies and procedures are followed to achieve desired results. Tasks The inspector shall accomplish the following tasks: Review the policies, procedures, instructions, and information to understand the controls associated with this element.

Questions			
2.1	Are controls in place to ensure that flight crewmembers who are assigned to operate within special navigation areas of operation are properly qualified?	Yes No, Explain	
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic		
2.2	Are controls in place to ensure that dispatchers who are assigned duties for special navigation areas of operation are properly qualified? Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Domestic	☐ Yes ☐ No, Explain ☐ Not Applicable	
2.3	Are controls in place to ensure that flight followers who are assigned duties for special navigation areas of operation are properly qualified? Updated: Rev # 3 on 09/15/2009 Kind Of Question: Supplemental	☐ Yes ☐ No, Explain ☐ Not Applicable	
2.4	Are controls in place to ensure that aircraft used in special navigation areas of operation meet the requirements for those operations? Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain	
2.5	Are controls in place to ensure that required flight crewmember actions are accomplished before and after entering special navigation areas of operation? Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	☐ Yes ☐ No, Explain	

	SAI SECTION 2 - CONTROLS ATTRIBUTE		
Drop-Down Menu			
1.	No controls specified.		
2.	Documentation for the controls do not identify who, what, when, where, how.		
3.	Controls incomplete.		
4.	Controls could be circumvented.		
5.	Controls could be unenforceable.		
6.	Resource requirements incomplete (personnel, facilities, equipment, technical data).		

7. Other.

SAI SECTION 3 - PROCESS MEASUREMENT ATTRIBUTE

Objective:

Process measurements ensure the operator uses an internal evaluation function to detect, identify, and eliminate or control hazards and the associated risk. For airworthiness elements this is a required function of operator's Continuing Analysis and Surveillance System (CASS), required by 14 CFR part 121.373. The director of safety and the quality assurance department often work together to accomplish this function for the operator. Negative findings could require amendments to the safety/internal evaluation program or CASS audit forms or checklists.

program or CASS audit forms or checklists.				
Tasi	Tasks			
	The inspector shall accomplish the following tasks:			
1	Review the control questions in Section 2 of this SAI.			
2	Review the operator's policies, procedures, instructions, and information to gain an of the process measurements accomplished for this element.	understanding		
Que	stions			
3.1	Are there process measurements that evaluate whether the operator's policies, procedures, and controls are achieving the desired results?	Yes No, Explain		
	Note(s): Inspectors should refer to the controls in section 2 of this SAI for possible process measurements for this element.			
	Persons engaged in this process should have a method for identifying undesired results.			
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic			
3.2	Do the operator's process measurements assess the performance of the processes associated with this element?	☐ Yes ☐ No, Explain		
	Note(s): Verify audits exist to measure this elements performance.			
	Verify audits are scheduled for this element.			
	Verify audits ensure everyone, including all outsource providers; comply with the operator's program, manual and all applicable regulations and statutes.			
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic			
3.3	Does the operator's program require the documentation of process measurement results?	Yes No, Explain		
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic			
3.4	Does the operator's program describe how the process measurement results are	Yes		

used to improve the ability to achieve the desired results?

☐ No, Explain

	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	
3.5	Does the organization that conducts the process measurements have direct access to the person with responsibility for this element?	Yes No, Explain
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic	

	SAI SECTION 3 - PROCESS MEASUREMENT ATTRIBUTE
	Drop-Down Menu
1.	No process measurements specified.
2.	Documentation for the process measurements does not identify (who, what, when, where, how).
3.	Inability to identify negative findings.
4.	No provisions for implementing corrective actions.
5.	Ineffective follow-up to determine effectiveness of corrective actions.
6.	Resources requirements (personnel, facilities, equipment, technical data).
7.	Other.

	SAI SECTION 4 - INTERFACES ATTRIBUTE			
Objective: Data collected in this section helps determine if the operator manages the interfaces (i.e. interactions) associated with this element. Interfaces occur in a procedure where the responsibility for accomplishing				
	is transferred from one person, work group, or organization to another. Procedures ugh to ensure the smooth transfer of work and information.	must be detailed		
Tasi	ks			
	The inspector shall accomplish the following task:			
1	Review interfaces associated with the processes for this element.			
Que	estions			
4.1	Where interfaces exist in this element, are the procedures written in enough detail to preclude a breakdown or discontinuity in the activity?	☐ Yes ☐ No, Explain		
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic			
	Milia Of Question. Flag, Supplemental, Domestic			
	SAI SECTION 4 - INTERFACES ATTRIBUTE			
Drop-Down Menu				
1.	No interfaces specified.			
2.	The following interfaces not identified within the certificate holder's manual system:			
3.	Interfaces listed are inaccurate.			
4.	Specific location of interfaces not identified within the manual system.			

4. 5.

Other

SAI SECTION 5 - MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTE

Objective:

Data from questions in this section will help the determine if there is an identifiable, qualified (when required by CFR), and knowledgeable person who is:

- Responsible for the process,
- Answerable for the quality of the process, and
- Has the authority to establish and modify the process

Tasks		
	The inspector shall accomplish the following tasks:	
1	Identify the person(s) who has overall responsibility for this element.	
2	Identify the person(s) who has the authority to revise the procedures associated with this element.	
3	Review the duties and responsibilities of the above person(s).	
4	Review the appropriate organizational chart.	
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Questions			
5.1	Is an individual(s) identified who is responsible for the quality of the procedures associated with this element?	Yes No, Explain	
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic		
5.2	Is an individual(s) identified who has the authority to establish and modify the policies, procedures, instructions, and information associated with this element?	Yes No, Explain	
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic		
5.3	Are duties and responsibilities documented for those who manage the procedures associated with this element?	Yes No, Explain	
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic		
5.4	Does the operator document the procedures for delegation of authority for this element?	Yes No, Explain	
	Updated: Rev # 3 on 09/15/2009 Kind Of Question: Flag, Supplemental, Domestic		

	SAI SECTION 5 - MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTE
	Drop-Down Menu
1.	Not documented.
2.	Documentation unclear.

- 3. Documentation incomplete.
- 4. Other.